



NUTRI•KNOW

STRUVITE (IT)

RENURE (BE)

POCKETBOER 2
(BE)

Grass2Algae
(BE)

MOPS (IE)

Duncannon Blue
Flag Farming (IE)

Biorefinery
Glas (IE)

Slurry
Concentrator
(ES)

Manure
Management
Tool (ES)

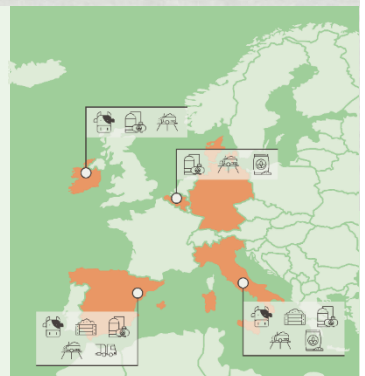
FERTICOOP-GO
(ES)

SOS_AQUAE
(IT)

GAS LOOP (IT)

Exchanging easy-to-understand nutrient management knowledge with farmers

NUTRI-KNOW aims to improve nutrient management practices in agriculture by establishing an ongoing cycle of knowledge exchange for the benefit of both farmers and the environment.



Sustainable farming techniques and renewable fertilisers to combine agriculture, water and environment

SOS_AQUA aims to advance and promote sustainable agricultural techniques associated with the use of "renewable" fertilisers derived from slurry and digestate treatment. The goal is to enhance the efficient use of existing nutrients on farms while reducing reliance on synthetic mineral fertilisers.

Challenge

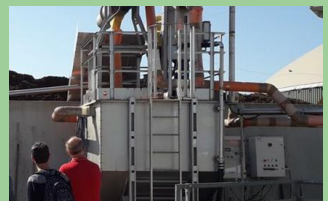
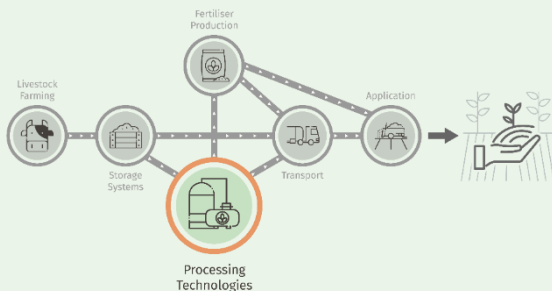
Develop a system to valorise the liquid fraction of the digestate (the most present and most problematic fraction to be valorised) by mixing it with water in fertigation for efficient use of nutrients and to save mineral fertiliser input.

Activity

- Develop and implement microfiltration and subsurface drip irrigation.
- Test, and evaluate the efficiency and nutrient balance of the solid-liquid separation followed by microfiltration treatment.

Results

A technically and economically viable solution with low filtration costs has been developed. Initially, the digestate underwent common solid-liquid separation, resulting in a solid fraction and a clarified liquid fraction. The clarified fraction then went through microfiltration at 50 µm, producing microfiltered digestate, which can be transferred to the field and utilised. It can be mixed with water for fertigation on growing crops and injected into a Subsurface Drip Irrigation system with drip lines buried at a depth of 25 cm.



Microfiltration equipment

Follow
our journey!

Visit www.nutri-know.eu



@NutriKnow



@nutriknoweu



nutri-know



Nutri-Know



Funded by
the European Union